

# 2011-2012 Weekly Field Reports

## Copacabana, King George Island

Volume 5  
November 14, 2011

### Science Report:

1. Penguins: Adélie penguin males and females are exchanging incubation duties more frequently as chick hatching approaches. Soon after laying the 2 eggs, the female goes to sea for about 10-14 days to replenish her energy stores after fasting for almost 3 weeks. When she returns, the male then goes to feed for about 7-10 days. After this, the duration of foraging trips get shorter until they are exchanging at the nest daily by the time the chicks hatch.

Adélie penguin egg measurements were carried out at Point Thomas on Tuesday (11/15). Both eggs at 50 nests are measured & weighed to give an indication of female condition at egg-laying. Preliminary analysis indicates that the mean volumes of both eggs are greater than the 25-year average, similar to measurements from the past two years. This could indicate very good over-winter & early spring feeding conditions for the penguins.

The gentoo penguins continue to exchange incubation duties daily, one member of the pair going out to feed at first light, then returning within 10-12 hours to relieve its mate.

No chicks have hatched yet, but nests are being checked more frequently to record accurate hatch dates.

Many known-age Adélie & gentoo penguins are breeding and being followed daily. We identify these by the bands they received as chicks, and this enables us to determine if there are any age-related differences in behavior or reproductive success.

More known-age Adélie penguins are breeding this year than during the past two years, most likely due to higher over-winter survival & better nesting conditions at the breeding areas when they arrived. Of the known-age Adélie penguins that laid eggs, 95% of the nests are still active. The number of known-age gentoo penguin breeders, however, is at the lowest it has been in a decade. This is possibly due to the heavy ice winter that preceded this breeding season, which often results in lower over-winter survival rates for this species. Of the known-age gentoo penguins that laid eggs this year, 96% of the nests are still active.

Chinstrap penguin adult weights & egg 1 measurements were carried out at the Uchatka & Patelnia colonies on Thursday (11/17). Fifty nests with both adults & only 1 egg present were randomly selected, then both adults are weighed, & the egg is measured & weighed. This year, all the measurements were slightly higher the 20-year mean, indicating that the birds arrived in good condition prior to breeding.



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2. Skuas: Regular checks of skua breeding territories continue, but no eggs have been laid.

The first Back-Country skua check was done on Tuesday (11/15). Most territories had at least one bird present, & many were attended by both members of the pairs from previous years.. No eggs were found, but this is not unusual, as most of these are south polar skuas, which usually arrive, & therefore breed, later than the skuas near the penguins.

We also did the first check of the skua territories around Uchatka & Patelnia on Thursday (11/17). Many territories had at least one bird present, with a few having both members in attendance. No eggs were seen.

3. Seals: No seals were seen during the weekly seal census at Copa on Saturday (11/19). No census was done at Point Thomas (PT) due to the weather. However, on Tuesday (11/15), a leopard seal was seen on the ice in Ezcurra Inlet & several elephant seals were seen on the beach near Arctowski Station, including one female with her pup, an adult male, & two weaners.

4. Other: The first Wilson's storm-petrel was seen on Tuesday (11/15). These breed in rock cavities, similar to the black-bellied storm-petrels that were reported last week.

### Weekly Weather:

Four of the days this week have had temperatures below freezing, with winds & snow out of the east or southeast. Two of the remaining three days were sunny & calm, with temperatures well above normal. Although the storm over the last three days did not result in an inordinate accumulation of snow, steady easterly winds drifted snow into some of the colonies, burying many of the same nests that were buried in the last storm.

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